

CLAIMS

What is claimed is:

1. A forearm handguard for a rifle, the handguard comprising:
 - (a) first and second mating half-grip pieces, at least the first half-grip piece defining an elongated body having a generally triangular lateral cross-section with two exterior sides and a mating side, the exterior sides of the triangular cross-section being formed substantially at a right angle to each other, the mating side of the triangular cross-section being centrally hollowed and having outer edges that form a mating surface for mating with the other half-grip piece to enclose an air space surrounding a portion of the rifle barrel;
 - (b) each half-grip piece being an injection molded polymer body; and
 - (c) at least the first half-grip piece having a longitudinally extending accessory mounting rail formed on each of the exterior sides substantially at right angles to each other and recessed in the half-grip piece such that the rails are located inside a laterally extended generally semi-octagonal outline defined by an end wall of the half-grip piece.
2. The forearm handguard of claim 1, wherein the second half-grip piece is essentially identical to the first half-grip piece.
3. The forearm handguard of claim 1 further comprising at least one cover adapted for engagement with one of the rails to cover the rail when the rail is not in use, the cover being shaped to replicate the laterally extended generally semi-octagonal outline.
4. The forearm handguard of claim 3, wherein the cover is formed of a flexible material.
5. The forearm handguard of claim 3, wherein the accessory mounting rails have two rows of opposing ribs and a guide channel along and depending under each row, and the cover plate has a pair of inwardly extending lips that deform around the rail to grip in the guide channels of the rail.

6. The forearm handguard of claim 5, wherein the accessory mounting rail is open at its front end to allow an accessory to slide onto the guide channels, and the rail terminating at a rear end against the end wall.
7. The forearm handguard of claim 1 wherein at least one end of the handguard includes a slot for receiving a gas return tube of the rifle, the slot being formed transverse to one of the exterior sides.
8. The forearm handguard of claim 7 wherein the mating surfaces are disposed at an angle of substantially 45 degrees off a vertical plane of the rifle when the handguard is mounted on the rifle with the gas return tube received by the slot.
9. A forearm handguard for a rifle, the handguard comprising:
 - (a) a pair of essentially identical mating half-grip pieces, each half-grip piece defining an elongated body with a generally triangular lateral cross-section having two exterior sides and one longer side, the exterior sides of the triangular cross-section being formed substantially at a right angle to each other, the longer side of the triangular cross-section being centrally hollowed and having outer edges that form a mating surface for mating with the other half-grip piece, the two half-grip pieces forming the forearm handguard enclosing an air space surrounding a portion of the rifle barrel when so mated;
 - (b) each half-grip piece having a longitudinally extending accessory mounting rail formed in the lateral center of each of the exterior sides thereof;
 - (c) at least one end of the half-grip pieces having a semicircular opening for wrapping around the barrel of the firearm and a slot extending from the semicircular opening for receiving a gas return tube of the firearm, the slot projecting from the semicircular opening at a substantially right angle to one of the exterior sides.
10. The forearm handguard of claim 9 further comprising a cover for each accessory mounting rail, the covers adapted for engagement with the rails to cover the rails when the rails are not in use, the covers defining a generally octagonal outer shape when the half-grip pieces are mated and the covers are engaged with the rails.
11. The forearm handguard of claim 10 wherein the covers are elastomeric.

12. The forearm handguard of claim 11 wherein each accessory mounting rail has two rows of opposing ribs and a guide channel along and depending under each row, and each cover has a pair of lips that resiliently deform around the ribs to engage the guide channels of a respective rail.

13. The forearm handguard of claim 10, wherein each half-grip piece further comprises an end wall on at least one end thereof, the end wall defining the same generally octagonal outer shape as the covers when the covers are engaged with the rails, wherein the ends of each cover abut the end wall when so engaged.

14. The forearm handguard of claim 9 wherein the mating surfaces of the half-grip pieces are oriented at an angle of substantially 45 degrees with respect to a vertical plane through the firearm when the half-grip pieces are mated around the barrel of the firearm and the recess receives the gas return tube.

15. The forearm handguard of claim 9 wherein

(a) both of the half-grip pieces have a semicircular opening for wrapping around the barrel of the firearm and a slot extending from the semicircular opening for receiving a gas return tube of the firearm, the slot projecting from the semicircular opening at a substantially right angle to one of the exterior sides; and

(b) when the half-grip pieces are assembled, the semicircular openings mate to form a substantially circular opening that is surrounded by a mounting apparatus adapted to engage either a triangular front handguard retaining ring or a circular front handguard retaining ring, the mounting apparatus comprising a ring with a generally hexagonal outer shape and at least two semi-arcuate engagement tabs disposed about the ring.

16. A handguard for a rifle comprising:

(a) a first half-grip piece comprising

(i) an elongated body having a generally triangular cross section with two exterior sides and a hollow mating side, the mating side having mating surfaces adjacent the exterior sides,

(ii) a longitudinally extending accessory mounting rail formed on each of the exterior sides,

(iii) a cover for each of the mounting rails,

(iv) a semicircular opening in at least one end of the elongated body and a slot extending from the opening toward one of the exterior surfaces; and

(b) a second half grip piece comprising an elongated body with mating surfaces that correspond with those of the first half grip piece;

(c) when the first and second half-grip pieces are mounted on a rifle with a gas return tube of the rifle received in the slot, the mating surfaces are disposed at an angle of about 45 degrees off a vertical plane of the firearm.

17. The handguard of claim 16 wherein the first and second half-grip pieces are substantially identical.

18. The handguard of claim 17 wherein when the substantially identical half-grip pieces are mated, the semicircular openings mate to form a substantially circular opening that is surrounded by a mounting apparatus adapted to engage either a triangular front handguard retaining ring or a circular front handguard retaining ring, the mounting apparatus comprising a ring with a generally hexagonal outer shape and at least two semi-arcuate engagement tabs disposed about the ring.

19. The handguard of claim 17 further comprising an end wall defining a laterally extended generally octagonal outline.

20. The handguard of claim 19 wherein the covers are elastomeric covers.

21. The handguard of claim 20 wherein when the covers are mounted on the mounting rails, the covers and exposed surface of the elongated body substantially replicate the laterally extended generally octagonal outline along more than half of the length of the handguard.

22. A handguard of the type formed from two elongated half-pieces that mate around a rifle barrel between the receiver and the front-sight/gas return tube assembly, when the half-pieces are mated, the handguard comprising:

a mounting apparatus for engaging different types of handguard retaining assemblies, the mounting apparatus comprising a ring with a generally polygonal outer shape and a series of semi-arcuate engagement tabs disposed about the ring.

23. The handguard of claim 22 wherein the outer shape of the mounting apparatus ring is generally hexagonal.

24. The handguard of claim 23 wherein the series of semi-arcuate engagement tabs comprises six engagement tabs disposed about the hexagonal outer shape at about 60 degree increments.

25. A cover for a handguard accessory mounting rail having two rows of opposing posts and a guide channel along and depending under each row, the rail cover comprising:

an injection molded, flexible, hollow, rubber body having a generally flattened top portion, outwardly sloping external sides, and deformable lips extending inwardly from the bottom of the sides into the hollow for engaging the guide channels;

the bottom surface of the top portion comprising post engaging members for limiting longitudinal movement of the cover relative to the rail.

26. The rail cover of claim 25 wherein the post engaging members comprise indentations for receiving the rail posts.